IN THE CLAIMS:

Please amend claims 35, 52-54, 57-65, and 67-69 as follows.

Claims 1-34. (Cancelled).

35. (Currently Amended) A method ~~of~~ comprising:

determining ~~the~~ a path of a signal between a donor network element and a remote station, the donor network element being associated with at least one repeater, the determining ~~method~~ comprising[[:]]

receiving at the remote station a plurality of signals associated with a plurality of network elements;

calculating an estimate of the distance between the remote station and each network element, based on the received plurality of signals, including an estimate of the distance between the remote station and each repeater associated with the donor network element, wherein the calculating of the estimate of the distance includes estimating the location of the remote station and thereby estimating an actual distance between each donor network element and the remote station and estimating an actual distance between each repeater and the remote station,[[;]] and wherein the calculating of the estimate of the distance further includes measuring physical quantities at the remote station, and thereby estimating a

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model distance between each network element and the remote station and estimating a model distance between each repeater and the remote station;

calculating a difference value for each donor network element and at least one repeater by summing the difference between each actual distance estimate and each model distance estimate obtained for each respective donor network element and at least one repeater;

determining that the signal is transmitted from the donor network element or at least one repeater having the lowest calculated difference value; and

selecting that the donor network element or repeater having the lowest calculated difference value to be the source of the signal.

36. (Previously Presented) A method according to claim 35, wherein the calculating of the estimate of the distance between the remote station and each network element further comprises:

selecting each one of the donor network elements and at least one repeater in turn as the source of the signal; and

performing said calculating for only the selected one of the donor network element and at least one repeater.

Claims 37-38. (Canceled)

39. (Previously Presented) A method according to claim 35 wherein the measured physical quantity includes the measurement, at the remote station, of at least one of: a time delay in a received signal; attenuation in a received signal; and received signal strength.

40. (Previously Presented) A method according to claim 39 wherein the estimating the actual distances further comprises summing the estimated actual distances.

41. (Previously Presented) A method according to claim 40 wherein the estimating the model distances further comprises summing the model distances.

42. (Previously Presented) A method according to claim 41 further including calculating a scale factor in dependence on the summed actual and model distances.

43. (Previously Presented) A method according to claim 42 wherein the scale factor is determined to adapt the scaled sums to be equal.

44. (Previously Presented) A method according to claim 43 wherein the scale factor is determined by dividing the summed actual estimates by the summed model estimates.

45. (Previously Presented) A method according to claim 43 wherein the model distances estimates are modified in dependence on said scale factor to produce a set of modified model distances.

46. (Previously Presented) A method according to claim 45 wherein the model distances are scaled by the scaling factor to produce the modified model distances.

47. (Previously Presented) A method according to claim 46 wherein the calculating of a difference value for each donor network element and at least one repeater includes summing the difference between each actual distance estimate and each modified model distance estimate obtained for each respective donor network element and at least one repeater.

Claim 48. (Canceled)

49. (Previously Presented) A method according to claim 35 wherein a plurality of signals are from a donor network element, wherein all steps are repeated for each such signal to determine a source of each signal.

50. (Previously Presented) A method according to claim 35, further comprising calculating the location of the remote station in dependence on the determined source of the signal.

51. (Previously Presented) A method according to claim 35 wherein the remote station is a mobile station and the donor network element is a donor base station.

52. (Currently Amended) ~~A network device configured to determine the path of a signal between a donor network element and a remote station, the donor network element being associated with at least one repeater, the network device~~ <u>An apparatus</u> comprising:

<u>a determiner to determine a path of a signal between a donor network element and a remote station, the donor network element being associated with at least one repeater, the determiner comprising</u>

a distance estimate <u>calculator</u> ~~calculating unit~~ configured to calculate an estimate of ~~the~~ <u>a</u> distance between the remote station and each network element, including an estimate of ~~the~~ <u>a</u> distance between the remote station and each repeater associated with the donor network element, based on a plurality of signals received at a mobile station,

wherein the distance estimate <u>calculator</u> ~~calculating unit~~ includes an <u>estimator</u> ~~estimating unit~~ configured to estimate the location of the remote station and thereby estimate an actual distance between each donor network element and the remote station, and estimate an actual distance between each repeater and the remote station<u>,</u>[[;]] and

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wherein the distance estimate <u>calculator</u> ~~calculating unit~~ further includes a <u>measurer</u> ~~measuring unit~~ configured to measure physical quantities at the remote station, and thereby estimate a model distance between each network element and the remote station and estimate a model distance between each repeater and the remote station;

a difference value <u>calculator</u> ~~calculating unit~~ configured to calculate a difference value for each donor network element and at least one repeater, including a summer configured to sum the difference between each actual distance estimate and each model distance estimate obtained for each respective donor network element and at least one repeater;

a ~~determining unit~~ <u>lowest difference determiner</u> configured to determine that the signal is transmitted from the donor network element or at least one repeater having the lowest calculated difference value; and

a ~~selecting unit~~ <u>selector</u> configured to select ~~that~~ <u>the</u> donor network element or repeater <u>having the lowest calculated difference value</u> to be the source of the signal.

53. (Currently Amended) An <u>apparatus</u> ~~network device~~ according to claim 52, wherein the remote station is a mobile station and the network element is a base station.

54. (Currently Amended) An <u>apparatus</u> ~~network device~~ according to claim 52 wherein the distance estimate <u>calculator</u> ~~calculating unit~~ includes:

a ~~selecting unit~~ source selector configured to select each one of the donor network elements and at least one repeater in turn as the source of the signal; and

a ~~performing unit~~ performer configured to perform said calculating for only the selected one of the donor network element and at least one repeater.

Claims 55-56. (Canceled)

57. (Currently Amended) An apparatus ~~network device~~ according to claim 52 wherein the measured physical quantity includes the measurement, at the remote station, of at least one of: a time delay in a received signal; attenuation in a received signal; and received signal strength.

58. (Currently Amended) An apparatus ~~network device~~ according to claim 57 wherein the ~~estimating unit~~ estimator further comprises a ~~summing unit~~ summer configured to sum the estimated actual distances.

59. (Currently Amended) An apparatus ~~network device~~ according to claim 58 wherein the ~~estimating unit~~ estimator further comprises a summer ~~summing unit~~ configured to sum the model distances.

60. (Currently Amended) A~~n~~ apparatus ~~network device~~ according to claim 59 further including a scale factor calculator ~~calculating unit~~ configured to calculate a scale factor in dependence on the summed actual and model distances.

61. (Currently Amended) A~~n~~ apparatus ~~network device~~ according to claim 60 wherein the scale factor calculator ~~calculating unit~~ configured to calculate the scale factor is further configured to convert the scaled sums to be equal.

62. (Currently Amended) A~~n~~ apparatus ~~network device~~ according to claim 61 wherein the scale factor is determined by dividing the summed actual estimates by the summed model estimates.

63. (Currently Amended) A~~n~~ apparatus ~~network device~~ according to claim 61 wherein the model distances estimates are modified in dependence on said scale factor to produce a set of modified model distances.

64. (Currently Amended) A~~n~~ apparatus ~~network device~~ according to claim 63 wherein the model distances are scaled by the scaling factor to produce the modified model distances.

65. (Currently Amended) An apparatus ~~network device~~ according to claim 64 wherein the difference value calculator ~~calculating unit~~ includes a summer configured to sum the difference between each actual distance estimate and each modified model distance estimate obtained for each respective donor network element and at least one repeater.

Claim 66. (Canceled)

67. (Currently Amended) An apparatus ~~network device~~ according to claim 52 wherein a plurality of signals are received from a donor network element, wherein all steps are repeated for each such signal to determine a source of each signal.

68. (Currently Amended) An apparatus ~~network device~~ according to claim 52, further comprising a location calculator ~~calculating unit~~ configured to calculate the location of the remote station in dependence on the determined source of the signal.

69. (Currently Amended) An apparatus ~~network device~~, comprising:

means for calculating an estimate of a distance between a remote station and each of a plurality of network elements, including an estimate of the distance between the remote station and each of a plurality of repeaters associated with a respective one of the plurality of network elements, based on a plurality of signals received at a mobile station,

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wherein the means for calculating the estimate of the distance includes means for estimating the location of the remote station and thereby estimating an actual distance between each donor network element and the remote station and estimating an actual distance between each repeater and the remote station, and wherein the means for calculating the estimate of the distance further includes means for measuring physical quantities at the remote station and thereby estimating a model distance between each network element and the remote station and estimating a model distance between each repeater and the remote station;

means for calculating a difference value for each donor network element and at least one repeater, including a summer for summing the difference between each actual distance estimate and each model distance estimate obtained for each respective donor network element and at least one repeater;

means for determining that the signal is transmitted from the donor network element or at least one repeater having the lowest difference value; and

means for selecting ~~that~~ the network element or repeater having the lowest difference value to be the source of the signal.